# A new Species of Ardeicola Clay (Mallophaga: Philopteridae)

by

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As a result of collecting Mallophaga from bird skins at the National Museum, Bulawayo, Rhodesia, three specimens of Ardeicola Clay were obtained and checked by Dr Th. Clay, Britis'n Museum (Nat. Hist.), London. The present note comprises the description of a new species of this genus found on the African spoonbill (Platalea alba Scopoli) and a comparison with the closely related species, Ardeicola platalea (L.) from the spoonbill (P. leucorodia major Temminck & Schlegel). The new species is dedicated to Mr. R. H. Smithers, Director of the National Museum, Rhodesia, in recognition of his excellent pioneering work in Natural History.

# Genus ARDEICOLA Clay, 1935

Ardeicola Clay, 1935, Proc. zool. Soc. Lond. 1935: 615. Type Species: Esthiopterum ardeae (Linn.)

The genus Ardeicola contains so far 39 recognized species infesting hosts belonging to the Ardeidae (herons), Ciconiidae (storks) and Threskiornithidae (ibises and spoonbills). Ardeicola smithersi spec. nov., figs. 1-10

Type host: Platalea alba Scopoli (Plataleidae\*, Aves)

FEMALE (fig. 1)—Length 3.36 mm

The most marked differences between the females of A. smithersi and A. plataleae are shown in the abdomen, the fourth abdominal segment (the third apparent) being considerably reduced in A. smithersi. In addition the shape of this particular segment is also markedly different as shown in fig. 3. These morphological features allow a quick identification of A. smithersi from A. plataleae. Measurements are given in Table 1.

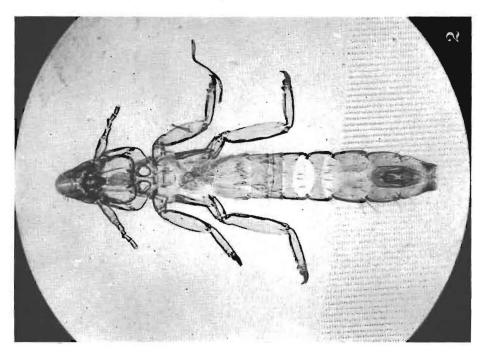
Male (fig. 2)—Length: 3.08 mm. Similar in shape to female with the exception of the fourth abdominal segment (apparent third segment) being much larger and different in shape from that of the female. The dimensions (length and width) of the head are only slightly different in the male and female as shown in Table 1. Easily distinguishable from A. plataleae by means of the genitalia (figs. 5-8) and antennae (figs. 9 and 10). The new species is slightly larger than A. plataleae.

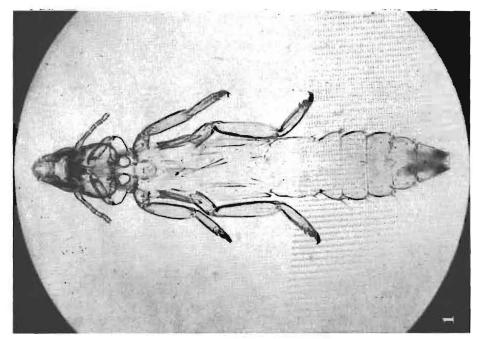
#### **EXPLANATION OF FIGURES**

Figs. 1-2. Ardeicola smithersi spec. nov. 1. Female (allotype); 2. Male (holotype).

Figs. 3-10. Ardeicola spp. 3. A. smithersi spec. nov., second to fifth abdominal segments; 4. A. plataleae (L.), the same, drawn to same scale; 5. A. smithersi, left paramere of genitalia (3-holotype); 6. A. plataleae, left and right parameres of male genitalia; 7. A. smithersi, basal plate and endomeres of male genitalia; 8. A. plataleae, the same; 9. A. plataleae, antenna (3-neotype, specimen No. 475); 10. A. smithersi, antenna (3-holotype).

<sup>\*</sup>The nomenclature of the Plataleidae is according to Peters (1931)





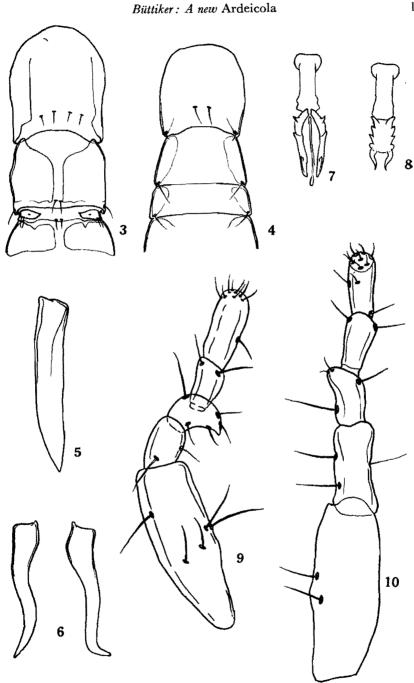


TABLE 1. Measurements (in mm) of A. smithersi spec. nov. mounted in Canada balsam:

|             |     |  |  |  | Fen    | nale  | Male                                    |       |
|-------------|-----|--|--|--|--------|-------|---|-------|
|             |     |  |  |  | length | width | length                                  | width |
| Head        | . , |  |  |  | 0.68   | 0.44  | 0.64                                    | 0.40  |
| Prothorax . |     |  |  |  | 0.20   | 0.36  | 0.20                                    | 0.36  |
| Pterothorax |     |  |  |  | 0.56   | 0.56  | 0.44                                    | 0.44  |
| Abdomen .   |     |  |  |  | 2.08   | 0.56  | 1.80                                    | 0.40  |
|             |     |  |  |  |        |       | *************************************** |       |
| Total       |     |  |  |  | 3.36   |       | 3.08                                    |       |

Other material of A. smithersi examined: 1 \( \rho\$ from Platalea alba, South Africa (no locality given), 10th December 1897, Hopkins collection in British Museum (Nat. Hist.), London; 4 \( \frac{1}{2} \) and 5 \( \rho \rho\$ from P. alba, Kenya (no locality given), April 1936, Meinertzhagen collection in British Museum (Nat. Hist.), London, slide No. 7604; 1 \( \rho\$ from P. alba from Kaluta, Caprivi Strip (S. W. Africa), 6th April 1949, collected from a skin at the National Museum, Bulawayo (Rhodesia). Specimen from Büttiker collection (No. 665) in British Museum (Nat. Hist), London; slide No. 1965-304; 2 \( \frac{1}{2} \)—and 1 \( \rho\$—paratypes from P. alba, from Naivasha, Kenya, September 1959. Meinertzhagen collection in British Museum (Nat. Hist.), London; no slide numbers.

Type specimens: 3-holotype and 2-allotype from Platalea alba Scopoli, Naivasha, Kenya, Sept. 1959, in the collection of the British Museum (Nat. Hist.), London.

A comparison of Ardeicola smithersi was made with A. plataleae (L.) of which the neoparatypes from the British Museum (Nat. Hist.) were used. A. plataleae was described by Linné from Platalea leucorodia leucorodia L. and the specimens used for comparison are the neoparatypes of the British Museum (Nat. Hist.) collected from P. leucorodia major Temminck and Schlegel from Jedda, Arabia [coll. Hopkins in British Museum (Nat. Hist.), slide No. 348], and India [coll. Meinertzhagen in British Museum (Nat. Hist.), slide No. 4989].

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